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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,427	11/17/2003	Jang-Kun Song	6192.0270.C1	2744

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1299 Pennsylvania Avenue, NW  
Washington, DC 20004-2402

EXAMINER
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MCPHERSON, JOHN A

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/713,427

Applicant(s)

SONG, JANG-KUN

Examiner

John A. McPherson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27 and 31-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39-46 is/are allowed.
- 6) ☒ Claim(s) 27, 31-38, 47 and 48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is responsive to the Amendment filed 1/13/04.
2. The Amendment and arguments filed 10/13/04 successfully overcome the rejection set for in paragraphs 1 and 3 of the Office Action mailed 7/13/04. Accordingly, these rejections are withdrawn.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 27, 31-38 and 47-48 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 12-25 of copending Application No. 09/928,349 (published as US 2002/0033927). Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of both sets of claims substantially overlap to claim the same

embodiment comprising patterning an insulating layer utilizing a mask including a patterned semitransparent film, an opaque pattern and a transparent pattern to form protrusions and taller spacers, wherein the insulating layer includes one or more of a photosensitive organic insulating layer, a photoresist film, and a silicon-based insulating layer.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 27, 31-32, 36-38 and 47-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 recites the limitations "the protrusion" and "the spacer" in line 10. There is insufficient antecedent basis for these limitations in the claim. This rejection could be overcome by amending "the" protrusion and "the" spacer to --a-- protrusion and --a-- spacer. Claims 31-32, 36-38 and 47-48 are included in this rejection only because they depend from an indefinite claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 27, 31-32 and 36-38 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2004/075798 (US '798) for the reasons of record as set forth in paragraph 2 of the Office Action mailed 7/13/04, and as further discussed below.

6. Claims 27, 31-38 and 47-48 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2002/033927 (US '927). US '927 discloses a method for fabricating a color filter substrate comprising the steps of forming a black matrix on a substrate; forming color filters on the black matrix; forming a common electrode on black matrix and color filters; depositing a photosensitive organic insulating layer on the common electrode; exposing the photosensitive organic insulating layer through a mask including a patterned semitransparent film, an opaque pattern and a transparent pattern; and developing the exposed photosensitive organic insulating layer to form a thin organic insulating pattern used to form fringe fields and a thick organic insulating pattern used for a spacer. See paragraphs [0102]-[0118] and Figures 5-8 and 10. Furthermore, in another embodiment the insulating layer may comprise a silicon-based insulating layer

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with photoresist film coated thereon, whereby the photoresist is exposed through the mask including a patterned semitransparent film, an opaque pattern and a transparent pattern to form photoresist patterns having different thickness; the exposed portions of the silicon-based insulating layer are etched through the photoresist patterns; and the thinner photoresist pattern is removed to form insulating patterns of different thickness. See paragraphs [0119]-[0127] and Figures 11-14.

***Allowable Subject Matter***

7. Claims 39-46 are allowed.

***Response to Arguments***

8. Applicant's arguments filed 10/13/04 have been fully considered but they are not persuasive. With respect to the rejection over US '798 (Inoue), Applicant argues that while this reference shows exposing the photoresist layer using two different mask, it does not disclose or suggest exposing the photosensitive organic insulating film to a light beam through a mask having an opaque area, a semitransparent area and a transparent area. However, see paragraphs [0174]-[0181] and [0195], wherein an embodiment is disclosed which utilizes a single mask having shaded, semi-shaded and unshaded portions.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. McPherson whose telephone number is (571)

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272-1386. The examiner can normally be reached on Monday through Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John A. McPherson  
Primary Examiner  
Art Unit 1756

JAM  
1/5/05